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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,281

04/28/2005

Simon Brusch

CE10056EP

6051

22917

7590

07/31/2006

MOTOROLA, INC.  
1303 EAST ALGONQUIN ROAD  
IL01/3RD  
SCHAUMBURG, IL 60196

EXAMINER
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NGUYEN, TUAN HOANG

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 07/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/533,281	<b>Applicant(s)</b> BRUSCH ET AL.	
	<b>Examiner</b> Tuan H. Nguyen	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28/04/2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15, 17 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17 and 20 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>04/28/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 04/28/2005 has been considered by Examiner and made of record in the application file.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerogiokas (US PUB. 2002/0187811) in view of Doner (U.S PAT. 5,901,355).

Consider claims 1 and 20, Gerogiokas teaches determining a transmit power in a cellular communication system comprising a first cell including an inner zone served by a first carrier (claim 17) and an outer zone served by a second carrier (claim 17); comprising the steps of: receiving measurement reports from a plurality of communication units of the cell (page 1 [0009]); the measurement reports comprising receive characteristics for a signal associated with the cell (page 3 [0037]); and determining a cell transmit power associated with the first carrier in response to the modified transmit power level (page 1 [0009]).

Gerogiokas does not explicitly show that generating a distribution of the receive characteristics; determining a modified transmit power level in response to the distribution of the receive characteristics.

In the same field of endeavor, Doner teaches generating a distribution of the receive characteristics (col. 3 lines 43-49); determining a modified transmit power level in response to the distribution of the receive characteristics (col. 4 lines 8-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, generating a distribution of the receive characteristics; determining a modified transmit power level in response to the distribution of the receive characteristics, as taught by Doner, in order to provide different frequency subsets are used for the inner and outer cell regions, and reducing intra-cell interference.

Consider claim 2, Doner further teaches the receive characteristics comprise signal receive levels (col. 2 lines 17-24).

Consider claim 3, Doner further teaches the receive characteristics comprise signal quality characteristics (col. 3 lines 14-18).

Consider claim 4, Doner further teaches the step of determining the modified transmit power comprises determining a modified transmit power level for which a ratio of receive characteristics of the distribution are above a receive characteristic threshold (col. 7 lines 59-66).

Consider claim 5, Doner further teaches the step of determining the ratio in response to a desired traffic ratio of the inner zone (col. 5 lines 6-16).

Consider claim 6, Doner further teaches the step of determining the ratio in response to a substantially full loading of the inner zone (col. 5 lines 17-35).

Consider claim 7, Doner further teaches the step of determining the ratio in response to an average traffic of the cell and a number of carriers supporting the cell (col. 5 lines 17-35).

Consider claim 8, Doner further teaches the receive characteristic threshold is a predetermined receive characteristic threshold (col. 7 lines 59-66).

Consider claim 9, Doner further teaches the step of receiving a user input and setting the receive characteristic threshold in response to the user input (col. 7 lines 59-66).

Consider claim 10, Doner further teaches the step of determining the receive characteristic threshold in response to a required quality level (col. 3 line 14-18 and col. 7 lines 59-66).

Consider claim 17, Gerogiokas further teaches the step of setting a transmit power of the first carrier to substantially the cell transmit power (page 1 [0010]).

5. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerogiokas (US PUB. 2002/0187811) in view of Doner (U.S PAT. 5,901,355) as applied to claim 1 above, and further in view of Wright et al. (U.S PAT. 6,760,566 hereinafter, "Wright").

Consider claim 11, Gerogiokas and Doner, in combination, fails to teaches the step of determining the receive characteristic threshold in response to a required interference level.

However, Wright teaches the step of determining the receive characteristic threshold in response to a required interference level (col. 9 lines 26-35).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Wright into view of Gerogiokas and Doner, in order to provide power threshold leveling in a satellite communication system.

Consider claim 12, Wright further teaches the step of determining the modified transmit power level comprises determining a receive characteristic reference value of the distribution corresponding to the ratio, and determining the modified transmit power level in response to the difference between the receive characteristic reference value and the receive characteristic threshold (col. 9 lines 26-35).

Consider claim 13, Wright further teaches the step of generating the distribution comprises normalising the receive characteristics to a reference transmit power (col. 6 lines 58-67).

Consider claim 14, Wright further teaches the step of generating a distribution comprises compensating the receive characteristics for a power control setting (col. 2 lines 52-60).

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gerogiokas (US PUB. 2002/0187811) in view of Doner (U.S PAT. 5,901,355) and

Wright et al. (U.S PAT. 6,760,566 hereinafter, "Wright") as applied to claims above, and further in view of Tigerstedt et al. (U.S PUB. 2002/0187784 hereinafter, "Tigerstedt").

Consider claim 5, Gerogiokas, Doner, and Wright in combination, fails to teaches the power control loop comprises a fast power control loop and a slow power control loop and the compensation of the receive characteristics is associated with only the fast power control loop.

However, Tigerstedt teaches the power control loop comprises a fast power control loop and a slow power control loop and the compensation of the receive characteristics is associated with only the fast power control loop (page 9 [0158]).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Tigerstedt into view of Gerogiokas, Doner, and Wright in order to ensure continuous operation of a mobile terminal as it approaches the border of its current radio network coverage by way of handover.

### ***Allowable Subject Matter***

7. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***



8. Any response to this action should be mailed to:

Mail Stop\_\_\_\_\_ (Explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22313


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571) 272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay A. can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information Consider the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Nguyen  
Examiner  
Art Unit 2618

 7/24/06  
QUOCHIE B. VUONG  
PRIMARY EXAMINER